MC0335

CAPRICODE

HEALTH BUILDING PROCEDURE NOTE 1

PROCEDURE for the PLANNING and PROCESSING of INDIVIDUAL BUILDING PROJECTS

Department of Health and Social Security: London

January 1974

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FOREWORD

These BUILDING PROCEDURE NOTES are intended to be a source of reference for all concerned with the planning of buildings for the health services which are the responsibility of the Secretary of State for Social Services. The first notes in the series aim to standardise the method of approach to the planning of health service buildings, especially the more complicated hospitals.

This note, which is a revision of an earlier note first issued in 1967, gives a detailed appraisal of the various stages through which a project must pass and indicates where the responsibility lies for carrying the proposal forward to the next stage. It describes the main considerations which must be taken into account at particular stages if proposals to provide buildings are to advance smoothly from conception to evaluation. In particular it sets out the procedures to be followed by Regional and Area Health Authorities in the preparation and approval of individual health service building projects and schemes, including those undertaken by local authorities prior to the re-organisation of the National Health Service on 1 April 1974. Certain variations to the procedure apply to teaching hospital and other joint DHSS/University Grants Committee projects and these are to be described in the forthcoming Teaching Hospital Supplement.

By strict adherence to the procedures described, maximum use of both manpower and capital resources will be achieved and delays due to omissions or inadequate cost estimating will be avoided. If the procedures are followed faithfully approval will, all other things being equal, be speeded up. This note is accordingly commended to Regional and Area Health Authorities and to all who are concerned with them in the provision of health service buildings. All should be aware of the guidance and of its importance in the context of the work which they do.

January 1974

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Abbreviations used in this note

AHA	-	Area Health Authority
AMT	-	Area Management Team
ATO	-	Area Team of Officers
AWO	-	Area Works Officer
BN	-	Hospital Building Note
DCG	-	Departmental Cost Guide (Appendix 7 to HBPN 6)
DCP	-	Departmental Control Plan
DHSS	-	Department of Health and Social Security
DN	-	Health Service Design Note
DoE	-	Department of the Environment
DV	-	District Valuer
EEC	-	European Economic Community
EN	-	Hospital Equipment Note
GP	-	General Practitioner
HB	-	Health Building Division of DHSS
HBPN	-	Health Building Procedure Note *
KEF	-	King Edward's Hospital Fund for London
LABN	-	Local Authority Building Note
MCP	-	Management Control Plan
MDB	-	Manufacturers' Data Base
NCP	-	Notional Cost Plan
NHS	-	National Health Service
OJ	-	Official Journal of the European Economic Community
PTE	-	Pre-tender Estimate
RCCS	-	Revenue Consequences of Capital Schemes
RHA	-	Regional Health Authority
RPCU	-	Regional Planning & Control Unit of DHSS
RPD	-	Regional and Planning Division of DHSS
RTO	-	Regional Team of Officers
RWO	-	Regional Works Officer
SCP	-	Summary Cost Plan
TM	-	Technical Memorandum
UGC	-	University Grants Committee

* including Hospital Building Procedure Notes 2, 3 and 5

GLOSSARY

For the purposes of Capricode, the following terms should be interpreted in accordance with this Glossary

APPROVED SUM

The cost approved (by RTO and, if necessary, by DHSS) :

(a) at the end of Stage 2 (Budget Cost);
(b) at the end of Stage 3 (PTE);
(c) at the end of Stage 4A (Adjusted Tenders).

Note: The approved sum at the end of Stage 2 (Budget Cost) will not be further updated on account of any subsequent increase in the general level of cost allowances, though exceptionally it may be adjusted for any alteration in functional content or in on-cost items which could have been foreseen at budget cost stage. (But see Note 2 of Appendix 2, Part 4).

BUILDING SCHEME

The work (which may be a part or the whole of the project) which is planned to proceed straight through design to construction in one continuous operation and which will normally be the subject of a single contract operation.

CAPITAL PROGRAMME

The planned activity of a RHA or AHA in one year on new large schemes plus the expenditure on small schemes, ie a list of large schemes due to start plus total activity on small schemes, excluding schemes where cost will be met entirely from funds other than the normal allocations. For a RHA, acquisition of land (as detailed in the related land programme) is also included.

CLIENT

The RHA is the client during the whole building process, from the outline planning stage through to the bringing into use of the health service building; the Project Team is an agent of the client and will act formally through its Coordinator.

CLIENTS' BRIEF

Instructions given by the client professions (doctors, nurses, administrators and others, eg their specialist colleagues) which contain a functional content to be included in the project and the policies which will help determine the design. The brief will be refined and become more detailed as planning develops; during Stage 3 of processing, the brief will include such information as room data and major group 2 equipment.

DEVELOPMENT CONTROL PLAN

A series of drawings showing the areas, volumes, engineering services network and operational relationships of the immediate phases and how the subsequent phases fit in with the overall concept of the project - all having regard to building shape, communications and character of the site.

MANAGEMENT CONTROL PLAN

The overall plan of execution of work related time, money and other resources, based upon a comprehensive analysis of the work content and timing in each sub-area of work contributing to the whole, eg the plan of work for the briefing team, design team, equipping and commissioning team and the contractor's organisation. It will normally be expressed in some diagrammatic form, eg a network or bar charts.

NOTIONAL COST PLAN

A statement of the design team's preliminary proposals for the broad cost allocations of the major portions (ie groups of elements) of each building in the scheme. This plan is an estimate prepared in conjunction with the outline design drawings, having regard to the design criteria and conforming to the approved Budget Cost for the scheme (ie cost limit or target cost).

PHASE

The order and timing of a part of the works comprising the project or scheme which, when completed, will usually be capable of being brought into immediate use.

PRE-TENDER ESTIMATE

The anticipated cost of the scheme assessed from the Bills of Quantities and other tender documentation immediately prior to obtaining tenders.

PROGRAMME (SEE CAPITAL PROGRAMME)

PROJECT

The complete development work evisaged in relation to any individual hospital or health service site, whether or not some parts of the work fall outside the scope of the programmes covering a forward period. A project may comprise one or more schemes and one or more phases. A scheme and a phase will normally be identical in work content but in some circumstances (for largely contractual reasons) a scheme may be broken down into two or more phases.

SCHEME (SEE BUILDING SCHEME)

SUBSTANTIAL CHANGE

A change which affects the concept of the project or scheme, whether by way of provision (or omisssion) of functions or alterations in design concept.

SECTION A

Introduction

1. Under the NHS Functions (Directions to Authorities) Regulations, 1973, the Secretary of State has directed that the function of health building shall be exercised by Regional Health Authorities but that they may secure the execution of this function by Area Health Authorities for particular buildings or types of building. In each case conditions are imposed, one of which is the use of this (and the other) Health Building Procedure Notes. The directions are contained in an instrument in writing reproduced at Appendix 6.

2 - 9. (paragraphs reserved)

RHA Works Organisation

10. Levels of operation

(a) The highest level of decision making will be the Authority itself. It will consider recommendations made by the Regional Team of Officers. The RTO will group the more important Chief Officers. The Regional Works Officer (RWO) will be a member of the RTO, and will contribute the works professional input to its deliberations.

(b) It is likely that the RTO will exercise many of its routine functions on capital through accountable deputies who may or may not be constituted into a formal multi-disciplinary group. References to RTO throughout this note should be so interpreted.

(c) There should be multi-disciplinary teams dealing with each Area or group of Areas in a Region. Together with others from the Area or district involved, they will form the Project Team for a major building project. They will be responsible for making recommendations to the RTO on the capital projects put up in Area plans.

(d) There will be a works professional team supervising the Area's programmes of maintenance.

REGIONAL WORKS OFFICER'S DEPARTMENT

11. The RWO's role is to act as the leader of the Region's works professional team. He will exercise supervision over the design of works and the execution of Region's capital building programme and will have ultimate responsibility for maintenance and estate management within the Region. Exactly how he organises his Department to do its job will depend on his personality and those of the others involved. The following are some guidelines which may be found useful:

(a) The RWO's Department will be split into Divisions embodying the three professions, each under its own Chief, the Regional Architect, Engineer and Quantity Surveyor respectively. Each will have complete professional autonomy, but will be accountable to the RWO for the work of his Division. Each will be responsible for the day to day running of his Division, although the RWO will have the right in case of dispute to allocate resources to jobs within the Division.

(b) Each Chief Professional Officer will nominate members of his staff to participate in RHA Project Teams.

REGIONAL ADMINISTRATOR'S DEPARTMENT

12. Two Divisions of this Department will be involved in capital works - Services Planning and Capital:

(a) The Administrator (Services Planning) provides administrative co-ordination and support for the planning and development of health services and thus is particularly concerned with the drawing up of the clients' brief and the early stages of these procedures. He also assists in the monitoring of AHA planning and gives advice and support to AHA staff.

(b) The Administrator (Capital) bears responsibility for implementing the programme (of approved projects) within an agreed budget, co-ordinating client interests on individual projects and monitoring progress through these procedures. He also monitors AHA performance and processes schemes devolving to them.

It is likely that in many Regions these two Divisions will be combined under an Administrator (Planning), though he will effectively have two sub-divisions. In either case the administrators concerned will work closely in collaboration with each other and with professional staff of all disciplines.

13-19. (paragraphs reserved)

Regional and Area Project Teams

REGIONAL PROJECT TEAMS

20. The Project Teams will be responsible for carrying projects forward from the brief provided by the RTO through the procedural stages, and in particular for seeing that the plan of work derived from a comprehensive management control plan is executed within the timing and cost intended. Each Team should normally consist of a medical officer, nursing officer, architect, engineer, quantity surveyor and an administrator. The administrator in the Team will generally be regarded as the Project Co-ordinator and be responsible to the Administrator (Capital) for securing the progress of the project through each successive stage of the procedure. Other officers should be co-opted or consulted as required on particular aspects of the work, such as finance, equipment and supplies, catering, domestic management, work study, laundry and the ambulance service. The Treasurer will provide financial advice including the revenue consequences of projects and schemes and be represented at meetings when he considers it necessary. When private architects, engineers or quantity surveyors are engaged for the design of buildings, they should be associated with the working of the Team from the outset and in any case not later than Stage 1D.

21. Thus the Project Team will consist of a core of six officers, with access to advice from other specialised officers as required. It will seldom be necessary for all members and co-opted officers to be present at any individual meeting of the Team. The Co-ordinator will call together only those officers who have a specific contribution to make to a problem arising at a meeting; members and co-opted officers - especially the Treasurer's representative - should receive all project papers including notices of meetings and the record of decisions taken by the Team.

22. The Co-ordinator will ensure that projects keep to programme by:

(a) watching for delays and difficulties and identifying causes and ensuring that Project Team members are made aware of them and their consequences;

(b) suggesting ways of resolving problems;

(c) endeavouring to resolve the problems by personal exhortation in the first instance, and then, if necessary, by formal approach through the Administrator (Capital).

The Co-ordinator should be provided with adequate supporting staff.

23. Members of Project Teams have a collective responsibility for ensuring that all the necessary consultations are carried out and views taken into account. Individual members are responsible for representing the views of all branches of their own professions. They should be selected on the basis of the knowledge, experience and qualifications they can bring to hospital or health building planning and design, which is essentially a complex, detailed and highly technical operation: it follows that Teams will consist of experienced officers in the Health Service.

24. Each Team will have a great deal of detailed planning and design work to do, and it will normally be necessary for it to set up sub-groups to assist it in the solution of detailed technical issues. These sub-groups should invariably include the appropriate professional members of the Project Team or its nominated

advisers and members of the staff of the area, district (or sector) in which the project is located.

25. Except in the case of very large projects, a single Project Team will usually handle more than one project. There is great advantage, for example, in constituting a Project Team to cover all projects in a given area of the region.

26. Project Teams are sometimes criticised for their inability to make decisions and give instructions due to the pressure of particular interests. While consultation is important, members of teams must take account not only of the interests of their own particular disciplines but also the likely results of a failure to reach quick agreement: prolonged planning which is wasteful of time and effort, over elaboration of buildings and - because of the time scale - changes of mind.

27. Thus there should be a clear definition of the roles and responsibilities collectively and individually of the Project Team, the nomination of a single individual responsible for giving decisions on behalf of the Team and a simple procedure whereby he can obtain quick resolution of difficulties which might otherwise become protracted.

AHA PROJECT TEAMS

28. The Project Team will be responsible for carrying a delegated project forward from the brief provided by the ATO (or AMT) through the procedural stages and in particular for seeing that the plan of work derived from a management control plan is executed to the timing and cost intended. Each team should normally consist of a medical officer, nursing officer, administrator (the Co-ordinator) and quantity surveyor, together with designers arranged by the RWO and AWO and representatives from the district or sector level (as appropriate). The considerations mentioned in paragraphs 20 to 27 above (including the special arrangements for the Treasurer's Department) relating to projects or schemes being managed by RHA Project Teams should apply to AHA Project Teams as appropriate.

29 - 39 (paragraphs reserved)

Procedure for the Planning & Processing of Individual Building Projects

SECTION D

INTRODUCTION

40. Building projects should be taken from conception to evaluation in a series of inter-connected stages, as follows :

Stage 1 : Outline project intentions

Stage 2 : Planning - project and first scheme

Stage 3 : Design - scheme only

Stage 4 : Contract and Construction

Stage 5 : Commissioning

Stage 6 : Evaluation

The work to be done at each stage is summarised in Appendix 1. It is described more fully in Appendix 2, where reference is also to be found to other documents (see Bibliography) including separate hospital and other building procedure notes, which give detailed guidance on the more important operations.

THE BUILDING PROCEDURE

41. (a) Under Section 2(2) of the NHS Reorganisation Act, 1973, the Secretary of State has the duty of providing hospital and other accommodation. The NHS Functions (Directions to Authorities) Regulations, 1973, (SI No.....) provide for the assignment of this function by the Secretary of State to Regional and Area Health Authorities. Under these Regulations a direction will be issued which will specify how the function is to be carried out by the Authorities.

(b) Broadly, Regional Health Authorities are directed to undertake the planning and construction of buildings (including adaptation and improvement) with discretion to secure that the planning and construction of particular buildings or types of buildings should be executed by Area Health Authorities. Area Health Authorities are to be directed to undertake the maintenance of NHS buildings and land associated with them. Both groups of Authorities are to be directed to use the Department's building procedures. Regional Health Authorities could be directed in addition to observe other directions, whether general or specific, of the Secretary of State on building and engineering matters: Area Health Authorities will be directed to observe them and also any directions to them from Regional Health Authorities.

(c) The general direction on building matters will provide for the selection by the DHSS of particular projects and schemes for monitoring and control. Schemes not so selected will fall to be executed by the appropriate authorities in accordance with the Department's building procedures as laid down here and modified from time to time, and with any other general or specific directions which may be issued.

42. The characteristics of any health service building project or scheme which determine its acceptability to the Secretary of State are as follows:

(a) functional content, having regard to the existing and future level of services and to proposed changes of use and closures;

(b) the planning policies which govern the work of the health complex as a whole;

(c) site selected;

(d) site exploitation aspects, ie the DCP which describes how the functions to be provided in physical building on the site available are to refect the planning policies chosen;

(e) cost, both capital (including cost of land purchase) and recurrent;

(f) in the case of special departments, their layout.

The procedure provides for the Secretary of State to satisfy himself on all these aspects.

43. More detailed guidance on planning requirements, costing and design in respect of projects and schemes formerly carried out by local authorities may be found in LABNs 1, 3 and 7 and the appropriate Design Guides.

44. STAGES IN THE PROCEDURE

The sequence of the procedure is set out in the summary to Appendix 1, and described in detail in Appendix 2.

45. INTER-RELATION OF STAGES

Although the stage sequence is that in which decisions necessary to a logical progression of the project through planning to evaluation must be taken, the sequence is not necessarily indicative of the extent of the work to be done at each stage. Overlapping is both desirable and necessary in some measure so that proper decisions may be reached in the order that they are required. Thus, for example, the provisional conclusions to be reached on site selection at Stage 1E will be based on site investigation, consultation with planning authorities, consideration of acquisition, etc, possibilities which may have been considered before the project is allocated to the Project Team; also, the decision required on certain limited aspects of planning policies at Stage 2C can be formulated on the basis of general RHA policy and on provisional ideas on departmental policies in advance of their firm definition at Stage 3B; and similarly, even though firm schedules of accommodation are not required until Stage 3B, it may be useful to frame provisional schedules as early as Stage 1F in order, for example, to produce costing for non-Building Note departments; again, it will be found that some idea of building shape on which a decision is required at Stage 2D will be useful if not essential at Stage 1E (site appraisal).

46. Nevertheless, the following principles should always apply:-

(a) decisions should be taken or commitments entered into in proper sequence;

(b) no more anticipatory work should be done at each stage than is necessary to deliver firm decisions in the sequence in which they are required;

(c) preliminary conclusions on points which are not to be decided until a later stage should remain provisional until that stage is reached.

47. CONSULTATION

The procedure enables all concerned in the planning and design of a hospital or health service building to make their contribution. They will be unable to do so effectively unless well understood principles are applied to enable them to tender views and advice based on their own experience and on the nature of the plans for the development of the services for which they are responsible. The process of consultation must be firmly managed to avoid delay to the achievement of the new building. Consultation with the appropriate interests should take place at the following stages:-

(a) Programme intention - Health Care Planning Teams, District Management Teams, Joint Consultative Committees and AHAs will contribute to the Area Health Plans which are forwarded to the RHA, forming the basis of the programme intentions for the region as a whole;

(b) Projects and schemes -

(i) the Project Team will need to refine the outline project policy in discussion with representatives of the AHA, District,Family Practitioner Committee and Local Authority, as appropriate, during Stage 1;

(ii) representatives of the AHA, District or Sector, or other relevant bodies will need to be consulted on the planning policies and development control plans during Stage 2;

(iii) similarly, these bodies should be involved in the production of detailed departmental policies as illustrated by sketch plans during Stage 3.

48. TIME LIMITS FOR CONSULTATIONS

Firm time limits must be applied to accord with the project MCP (Appendix 2, Stages 1C and 2A) for the consultative activities referred to in sub-paragraph 47(b) above, and the Project Team, subject to later approval of the RTO or ATO, as appropriate, must decide its course of action at the end of that period in the light of the comments which have been received.

49. USE OF INDUSTRIAL TECHNIQUES

In order to provide functionally effective buildings quickly and at an acceptable price for the health building programme, it is desirable to develop and employ industrial techniques for bringing projects from inception to completion. RHAs are therefore required to utilise the material contained in the design notes which set out the basis for systems and standards. These design notes should be read with Capricode.

Summary of Stages in Planning

STAGE 1 OUTLINE PROJECT INTENTIONS -	Additionally - for schemes selected for DHSS approval to Stage 1:
1A Relationship to Area and Regional Strategy (HBPN 2) Preparation of outline project policy	in consultation with DHSS (RPD)
1B Briefing of Project Team	
1C Outline Management Control Plan for whole project	
1D Assessment of Functional Content (HBPN 3)	in consultation with DHSS (RPD)
1E Site Appraisals	in discussion with DHSS (HB)
1F Cost and Phasing (HBPN 6) Preliminary costing, using Departmental Cost Guide for whole project, based on anticipated phasing. On-costs to take account, where practicable, of site conditions and expected phasing costs Consideration of contracting procedure Estimation of revenue costs (where possible with anticipated extra costs of particular phasing or, for example, deep planning)	
1G Approval	(i) submission of outcome of Stages 1C - 1F to DHSS (RPD) (ii) formal meeting with DHSS (if necessary) (iii) approval by DHSS (RPD)

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Stage 2

STAGE 2

PLANNING - PROJECT AND FIRST SCHEME

	Additionally - for schemes selected for DHSS approval to Stage 2:
2A Management Control Plan Firm up project summary plan produced at Stage 1C. Subsidiary plan for first scheme up to start on site. Bar charts or network diagrams for following schemes (if any)	
2B Site Selection if not already made	in discussion with DHSS(HB)
2C Planning Policies (HBPN 2) Whole hospital; departmental, as necessary, to assess areas including additional accommodation and additional engineering	
2D Selection of Building Shape Prepare preliminary site development plan	
2E Development Control Plan (HBPN 5, DN 5) Based on 2C planning policies, 2D preliminary site development plan, provisional schedules of accommodation and preliminary sketches of major space-consuming departments for first scheme	
2F Confirmation of Functional Content Final check before client's brief in respect of functional content is frozen	
2G Budget Cost (HBPN 6) Up to date assessment of project and final assessment of individual schemes, areas and costs based on information provided by DCP Revenue estimate (first scheme)	
2H Selection of Contract Method EEC Directives 71/305 and 72/277	
2J Approval	(i) submission of outcome of Stages 2A-2H to DHSS(HB) (ii) formal meeting with DHSS (if necessary) (iii) approval by DHSS(HB)

Stage 3

Stage 3

DESIGN AND COST PLANNING

(Relevant phase or scheme only)

3A Notional Cost Plan
Based on an apportionment of the Budget Cost total between blocks of work and broken down into elements

3B Detailed Design Brief
Departmental policies (HBPN2)
Schedules of accommodation (BNs and DNs)
Activity and room data
Major group 2 equipment list

Note "Client's brief to include information in 3B is now frozen"

3C Sketch Plans
DNs, room data sketch designs

3D Equipment Schedules
ENs

3E Check that accommodation provided in the design matches the approved client's brief

3F Detailed Design
Production Material
(and cost planning)

Engineering Detail
(and cost planning)

Final MDB schedules

Preparation of OJ Notices
(when applicable)

Bills of Quantities and engineering documentation

3G Pre-tender Estimate and Summary Cost Plan ϕ

3H Approval *

3J Preparation of Tender Documents

Stage 4

CONTRACT AND CONSTRUCTION

Note: Tender invitations at commencement of Stage 4 (EEC Directives 71/305 and 72/277)

4A Contract
Details of tenders and cost analyses ϕ (HBPN6)

4B Construction

Stage 5

COMMISSIONING

(to start any time after Stage 3E)

Team Appointment and Briefing

MCP including closures or changes of use

Preparation of Revenue Estimate (details to RHA)

Preparation of Operational Handbooks ≠

Fixing of Establishment, Staff Assembly and Training

Preparation of Final Equipment Schedule and Orders

Equipment and Supplies Assembly and Storage

Engineering Commissioning

Cleaning

Opening, Public Relations and Publicity

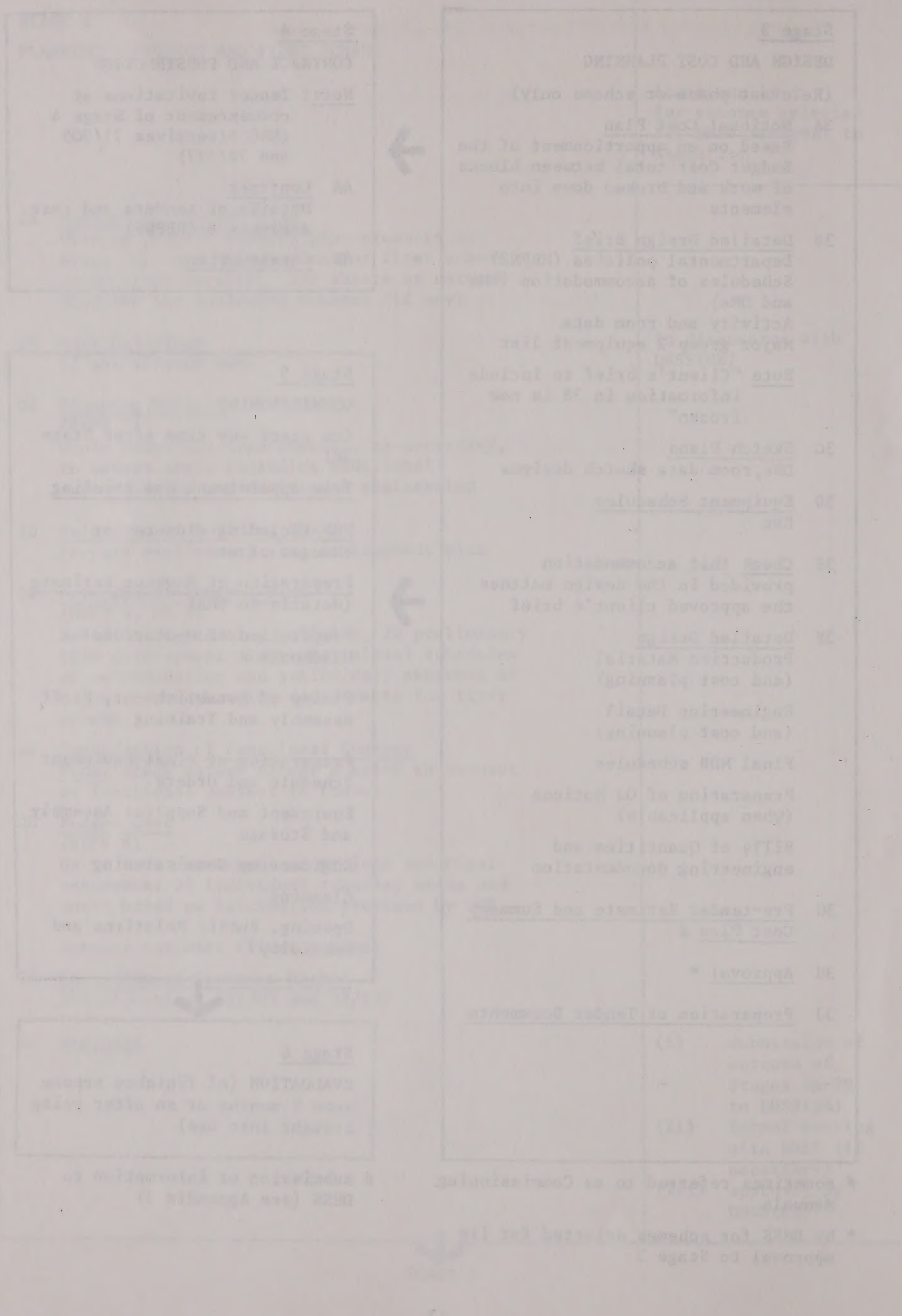
Stage 6

EVALUATION (of finished scheme some 9 months or so after being brought into use)

≠ sometimes referred to as Commissioning Manuals

* by DHSS for schemes selected for its approval to Stage 3

ϕ submission of information to DHSS (see Appendix 3)



MAJOR PROJECT undertaken by Regional Health Authority

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Appendix 2, Part 1

Procedural Stage 1: General Notes

1 When schemes are selected by DHSS for Stage 1 approval informal contact with DHSS should be maintained throughout Stage 1 so that possible difficulties can be resolved before the point of submission for formal approval is reached. RPD will act as the co-ordinator of DHSS views during this Stage and will be the point of contact for discussions on "client's brief", primary functional content (clinical facilities), general location of new provision, revenue consequences and phasing except in so far as it relates to cost, time and physical constraints. All other aspects will be the concern of DHSS(HB).

2 The work at Stage 1 is in the nature of a preliminary study : the object is to establish whether the programme intention can be attained within the financial allocation earmarked for the project, or the extent to which the original programme intention must be modified so that it can be achieved within the capital and revenue financial constraints. It is neither necessary nor desirable to go into great detail in establishing areas and costs at Stage 1. The only firm decision reached as a result of Stage 1 is on functional content, although, subject to the assessment of actual on-costs (rather than the use of a notional figure) a firm decision on the site≠ may be taken. Apart from an assessment of costs for this purpose, the Stage 1 work on floor areas, costs and planning policies results in approximations close enough to allow checks against the programme allocation. Firmer area and cost decisions cannot be taken until the end of Stage 2.

3 In considering phasing and the breakdown of a project into schemes, the Project Team should ensure that construction is planned to produce viable units which can be brought into use with little or no delay. In this connection the dependence of some departments on others may dictate their position in a phased project. It should never happen that accommodation or equipment remain unused for any substantial period because they are waiting for complementary facilities to be completed in later phases.

4 A preliminary MCP is best prepared as soon as possible after the project is allocated to the Project Team, so that from the outset all concerned are aware of the time scale for the various stages and the points of decision. DHSS (HB) must be consulted about the time allocation for their approval to submissions and the expected date of submissions. The time allowed will start from the receipt by DHSS of the complete submission even if a substantial part of the information has been submitted in advance. It is difficult, however, to give a standard time for the approval stage since this will vary not only with the complexity of the project but also with the quality of the submission and the extent of pre-submission consultation.

5 Revenue estimates must be considered with, and submitted to DHSS at the same time as, the capital submission in Stages 1 and 2 (see HBPN 6, para 28). As revenue costs will vary according to the detailed content of phases, estimating should follow HBPN 6, para 26. Thus the relative real costs of alternative solutions in terms of the balance between revenue and capital resources should be carefully considered. The smaller the phases the earlier the benefits of the investment are obtained by the introduction of the service. The earlier revenue consequences will, however, have to be considered.

≠ see note 7 below

6 Large hospitals, for example, district general hospitals, inevitably have a considerable impact upon the visual environment. Steps should be taken to make the hospital buildings as pleasant looking as possible, consistent with proper economy, and to ensure that they harmonize with their surroundings if that is desirable. At Stage 1E (xi) the Regional Architect should submit (informally) to DHSS Architects site perspectives, photo-montage, etc, together with an indication of the elevation of the hospital.

7 The redevelopment of an existing hospital will generally be only one of several options open in the RHA. In such cases regard should be paid to the special considerations listed in Stage 1E(d)(ii) when the options leading to site selection are examined. Additionally, the value of the existing site should be compared with the cost of acquiring a new site. At Stage 1F the known on-cost factors of redevelopment projects are likely to be clear enough to warrant a refinement of a notional 50%. In the light of the RHA's experience an addition should be made at this Stage to the on-cost figure to take account of any extra cost of a redevelopment solution.

MAJOR PROJECT UNDERTAKEN BY RHA

Procedure leading to the building of a complete hospital on a new site (or redevelopment of an existing hospital)

Stage 1. OUTLINE PROJECT INTENTIONS: Programme & functional content, site & preliminary cost appraisals

Stage	Executive Responsibility	Task	Source of Guidance	Notes
1A Relationship to Area and Regional strategy	RTO	Prepare outline project policy, based on information provided by AHA and District, including : (a) project objectives and priorities of provision; (b) project priorities in relation to other developments in the region; (c) provision in regional programme:- content; timing; finance (capital, land & revenue); (d) general location; (e) possible consequential closures or change of use of existing hospitals or facilities.	HBPN2	Discussion with DHSS(RPD) leading to inclusion or confirmation of project in outline capital programme and, when appropriate, in the related land programme.

Stage	Executive Responsibility	Task	Source of Guidance	Notes
1B: Briefing of Project Team	RTO	Provide brief for Project Team consisting of:		
		(a) Membership of Project Team, including nomination of co-ordinator and of management control officer (if different from co-ordinator);	HBPN 1 (paras. 20 to 28)	
		(b) outline project policy;	Stage 1A (above)	
		(c) regional policies (including space standards) applicable to project.	HBPN 2	
1C: Outline Management Control Plan	Project Team	Prepare outline MCP for the whole project based on information in outline capital programme.		The plan at this stage should show particularly the time scale for the various stage activities. DHSS to be consulted in relation to its involvement on selected schemes.

Stage	Executive Responsibility	Task	Source of Guidance	Notes
1D: Functional Content	Project Team	(a) Refine: (i) Functional content to take account of service need, catchment population and area, state of existing and planned hospital, health and local authority service provision, preliminary staff estimates (available and required) and educational needs; (ii) possible closures or changes of use;	HBPN 3 HBPN 6	Consultation with AHA, District and, if appropriate, LA and Family Practitioner Committee on functional content and effect on existing services. Conclusions to be agreed with RTO.
		(b) Complete statement of functional content (Form FC(R));	HBPN 3 (Appendix) HBPN 6	
		(c) Assess broadly departmental areas;	HBPN 6 (Appendix 7) Regional policies for other schemes	
		(d) CARRY FORWARD RESULT TO STAGE 1G.		

Stage	Executive Responsibility	Task	Source of Guidance	Notes
1E: Site Appraisals	Project Team	(a) Assess optimum size of site needed for provision;		
		(b) Appraise (using where appropraite, investment appraisal techniques, such as present worth) possible sites including, eg the following factors:		
		(i) size, shape, influence of any existing and adjacent buildings;		Consider possible effect of site clearance on the timing of subsequent works.
		(ii) topographical and geological conditions;		
		(iii) problems of acquisition (including rehousing), owners' willingness to sell;		
		(iv) decanting problems;		
		(v) cost of new site or value of land currently owned, and value of land which might be rendered available for disposal;		
		(iv) accessibility within the catchment area (including availability of public transport);		
		(vii) nurse, domestic and other staff recruitment potential;		

Stage	Executive Responsibility	Task	Source of Guidance	Notes
1E: Site Appraisals (continued)	Project Team	(viii) town planning, including road proposals, access and traffic problems (including car parking), external noise factors, possibility of earmarking land for hospital development;	DoE Circular 23/72	
		(ix) availability of mains services;		
		(x) physical integration with existing or planned health and personal social services developments;		
		(xi) likely restrictions on appearance of buildings (eg Royal Fine Art Commission recommendations);		
		(xii) massing of buildings;		
		(xiii) boilerhouse chimney height;		
		(xiv) suitability of site for standard design buildings;		
		(xv) possible effect of site clearance or subsequent works.		

Stage	Executive Responsibility	Task	Source of Guidance	Note
1E: Site Appraisals (contd)	Project Team	(c) Draw up analysis of appraisal with preliminary conclusion and result of informal approach to Local Planning Authority;	HM(72)77	
		(d) Decide whether to:		
		(i) build a complete hospital on a new site (if so, CARRY FORWARD RESULTS TO STAGE 1G);		If the Project Team's conclusions on site location and area differ significantly from those in the outline project policy clear with RTO.
		(ii) or redevelop an existing hospital. If so		
		1. Refer to Stage 1 General Note 7;		
		2. Review the Stage 1D functional content and check existing buildings. Express if possible in functional units of continuing use. These can then be offset against the total functional unit requirements for the project as a whole and the overall cost adjusted accordingly;		Informal consultation with DHSS(HB) advisable on selected schemes. It may be appropriate in certain cases to confirm site selection at this Stage.
		3. Consider possibility of adjusting site area for more economical building;		
		4. Consider building shape and site used in relation to any potential for release of surplus land;		
		5. Reassess suitability of services, access and car parking arrangements at existing site;		
		6. CARRY FORWARD TO STAGE 1F.		

Stage	Executive Responsibility	Task	Source of Guidance	Notes
1F: Cost and Phasing Intentions	Project Team	(a) Breakdown, if appropriate, project into schemes and/or phases compatible with regional and area priorities and DHSS guidelines, financial constraints (capital and revenue) and acceptable contract size;	HBPN6 (Appendix 7), OR Services Note 29(a) Hospital Size/Capital Cost Paper 5, May 1973	
		(b) Cost departmental accommodation. On-costs to be at notional 50% unless a broad assessment of proposed site or phasing costs already indicates a significantly different figure. Complete Forms A1, A2 and, if on-costs differ from 50%, Form A3;	HBPN6 (Appendix 10)	When site characteristics already known and on-cost factors largely established, a realistic % for on-costs should be used (see HBPN6, Appendix 8).
		(c) Assess theoretical revenue costs. Complete Form RCCS A;		
		(d) Consider optimum contractual procedures to produce viable units in order of priority, taking into account economic construction, access to potential field of tender, etc and time limits for OJ Notices;	HBPN6 (paras 26-35) and Appendix 4 EEC Directives 71/305 and 72/277	The project estimate (capital and revenue) for a redevelopment scheme would normally include existing buildings (HBPN6, para 33).
		(e) CARRY FORWARD TO STAGE 1G - when it has been agreed to develop a new site. If an existing site is to be redeveloped: (i) consider phasing of redevelopment in the light of service needs; (ii) assess feasibility of decanting and demolishing existing buildings (including need for temporary buildings), utilisation of existing buildings and space for contractor's operations; (iii) CARRY FORWARD TO STAGE 1G.		

Stage	Executive Responsibility	Task	Source of Guidance	Notes
1G: Submission	Project Team	Submit outcome of Stages 1C - 1F:		
		(a) to RTO or;		
		(b) for selected schemes, via RTO, to DHSS.	HBPN1 (Appendix 3)	(i) 12 copies of submission required by DHSS (RPD).
Approval	RTO or DHSS	APPROVAL		(ii) DHSS will indicate whether responsibility for subsequent planning and design stages will be delegated to RHA (unless this has already been done in approving the programme).
				(iii) Any substantial changes in the project, contemplated after Stage 1G approval has been given, to be notified to DHSS(RPD).

Appendix 2, Part 2

Procedural Stage 2: General Notes

1. The object of Stage 2 is to develop the outline proposals, which have evolved from the Stage 1 preliminary studies, into a fully detailed brief for the designers to take into sketch drawings. Thus at the end of Stage 2 there should exist:

(a) A firm functional content for the first scheme. There should be no change in this part of the "client's brief" for the scheme after the conclusion of this stage. Any substantial change to a selected scheme proposed exceptionally after Stage 2 will require the specific approval of DHSS (RPD or HB as appropriate). DHSS should be notified of any such proposal as early as practicable;

(b) A MCP showing how the activities necessary to bring the first scheme to start of construction are related to each other in time and provisional content, and identifying the key points for action and decision in the time scale;

(c) A firm statement of the planning policies which will govern the working of the hospital as a complex of departments inter-related one with another;

(d) A DCP showing the disposition of departments one to another, the communications, services network and the way (ie schemes or phases) in which total development is to be achieved in sequence. The plan thus necessarily indicates the perimeter outline of at least the major space-consuming departments.

(e) A cost for building and engineering work within which the subsequent detailed design must be cost planned, built up from a statement of areas for each department, service and communications and the measurement of other on-cost factors.

2. The decisions required at each point during Stage 2 are intended to be reached sequentially, but see paragraph 45 (Section D) on "inter-relation of stages".

3. The areas attributable to each department and service at Stage 2 will be derived from work done on preliminary departmental policies, provisional schedules of accommodation and preliminary sketches for the main space-consuming departments. This work needs finalising only during Stage 3, and undue time should not be spent on achieving precision unnecessary at Stage 2. DHSS does not require that the areas and costs attributable to each department, service, space or on-cost factor should be immutably fixed at Stage 2; the aim is simply to fix the cost and physical and organisational framework within which the detailed design can proceed on the basis of the work done at Stage 3, in the knowledge that however the areas and costs of individual departments, functions, spaces, policies and on-cost factors are varied during detailed design, the total cost of the complete project will be kept within the Budget Cost established at the end of Stage 2.

4. A DCP and Budget Cost should cover the following:

(a) whole project to be built as a single scheme ——— in detail for whole project;

(b)	(i) whole project to be achieved in schemes separated by time and let under separate contracts;	immediate scheme: detailed areas and costs
	(ii) project (eg a very large project) to be achieved through continuous construction, but starting on the ground on the basis of detailed design for first phase only - subsequent phases being designed in parallel with construction work on first phase.	remaining schemes: block allocation of space on DCP using DCG areas unless other considerations apply. Budget Cost to use DCG for on-cost considerations - see HBPN6

From Stage 2 onwards, detailed design will relate only to the immediate phase or scheme, within its particular total Budget Cost allocation. When the time comes to detail subsequent phases, the outling DCP and Budget Cost material for these phases should be reviewed and brought up to date to provide a firm basis for their design in detail.

5. It is important that some form of comparison with the Stage 1 totals should be undertaken during Stage 2, particularly when the DCP is being prepared. The aim should be to provide solutions in Stage 2 which will be the most economical, particularly as regards on-costs. If the comparison indicates that solutions being evolved will lead to a significant increase in the programmed financial allocation for the project the RTO (and DHSS if appropriate) should be consulted.

6. If, as Stage 2 proceeds, it becomes clear that a scheme or phase will contain unusually expensive features, eg abnormally heavy engineering requirements, or experimental or research aspects which will add substantially to the cost, there should be informal consultation with the RTO (or DHSS) as early as possible to avoid delay at Stage 2 approval.

7. At a convenient time during Stage 2, a Notice of Proposed Development should be sent to the local planning authority (HM (72) 77).

8. Following formal approval to Stage 2J (or informal approval to Stage 2B) steps should be taken to acquire any land which DHSS has agreed is essential for the building to proceed, provided that there are no objections from the local planning authority to the development.

9. Because of the importance of the tasks at Stage 2, and the fact that the decisions taken determine the eventual outcome of the project, informal consultation between the Project Team and the RTO (or DHSS) must continue throughout this Stage. A formal meeting between the Project Team and DHSS may be necessary.

10. When it has been agreed, at Stage 1E(d) or Stage 2B, that an existing hospital will be redeveloped, there will be an early need during Stage 2 (and onwards) for existing staff to receive education on the policies (whole and departmental) which are to be followed in the new hospital.

Stage 2: PLANNING – PROJECT & FIRST SCHEME: Major planning policies, DCP, Budget Cost

Stage	Executive Responsibility	Task	Source of Guidance	Notes
2A: Management Control Plan	Project Team	(a) Update MCP for whole project; (b) Prepare subsidiary MCP for first scheme covering planning and design up to start of work on site; (c) Prepare bar charts or network diagrams showing time relationship of planning, design and commissioning of other schemes in project (if any); (d) CARRY FORWARD RESULTS TO STAGE 2J.		Clear with Administrator (Capital) and RWO in relation to resource commitments for remainder of regional programme.
2B: Site Selection (if not completed at Stage 1E)	Project Team	(a) Produce detailed report, expanding the Stage 1 report on recommended site to include, eg soil conditions and any other factors. Changes since the Stage 1 report to be indicated; (b) CARRY FORWARD RESULTS TO STAGE 2D.		On selected schemes discuss with DHSS(HB) who will consult DHSS(RPD) as necessary to obtain informal agreement.
2C: Planning Policies	Project Team	(a) Prepare detailed project policy statement (whole hospital policies and outline policies for major space-consuming departments); (b) CARRY FORWARD TO STAGE 2D AND RESULTS TO STAGE 2J.	HBPN2; regional policies (including space standards); outline project policy; traffic studies; O & M and Work Study exercises; specific studies; provisional departmental policies	(i) Clear with RTO; (ii) Copies to DHSS (appropriate professional or Administrative Divisions) as they become available - for advance information or discussion.

Stage	Executive Responsibility	Task	Source of Guidance	Notes
2D: Selection of Building Shape	Project Team	(a) Establish plot ratio; (b) Consider general shape for project (including economic appraisal) by reference to: (i) floor area required; (ii) detailed project policy; (iii) site characteristics and on-cost factors; (iv) standard design (of departments, etc); (v) preliminary sketches of major space-consuming departments. (c) Summarise, if necessary, reasons for not adopting the theoretically most economical shape; (d) Prepare preliminary site development plans; (e) CARRY FORWARD TO STAGE 2E AND RESULTS TO STAGE 2J.	Stage 1 areas and provisional schedules of accommodation. Stage 2 - planning policies. HBPN6 (Appendix 9). BNs and DNs	

Stage	Executive Responsibility	Task	Source of Guidance	Notes
2E: Development Control Plan	Project Team	(a) Prepare outline of engineering service requirements; (b) Draw up DCP - in full for first scheme, and in outline for the remainder of project; (c) CARRY FORWARD RESULTS TO STAGE 2J.	HBPN5	On selected schemes, informal discussion with DHSS (HB and its associated professional colleagues) is essential during the stages leading to completion of DCP.
2F: Confirmation of Functional Content	Project Team	Final check of functional content to take account of any further change in "client's brief".	Stage 2, General Note 1	It is envisaged that there will be periodical checks on client requirements up to, and including, Stage 2F.
2G: Budget Cost	Project Team	(a) Prepare Budget Cost statement (Forms B1, B2 and B3) in full detail for first scheme, in outline for later schemes; (b) Prepare revenue cost estimate in detail for first scheme (RCCS Forms B1, B2, B3 and B4); (c) CARRY FORWARD RESULTS TO STAGE 2J.	HBPN6 (Appendix 11) HBPN6 (Appendix 4)	Clear through RTO.
2H: Contract	Project Team	(a) Select contract method; (b) Consider implications of EEC Directives on timing, etc; (c) CARRY FORWARD TO STAGE 2J.	EEC Directives 71/305 and 72/277	Prior DHSS agreement to be obtained to any unorthodox contracting methods.

Stage	Executive Responsibility	Task	Source of Guidance	Notes
2J: Submission	Project Team	Submit outcome of Stages 2A - 2H:		
		(a) to RTO, or;		
		(b) for selected schemes, via RTO, to DHSS.	HBPN1 (Appendix 3)	(i) 12 copies of submission required by DHSS(HB);
Approval	RTD or DHSS	APPROVAL		(ii) formal meeting with DHSS, if necessary;
				(iii) DHSS will indicate whether responsibility for subsequent design stages for first scheme will be delegated to the RHA (unless this has already been done in approving the programme);
				(iv) equipment costs are subject to separate approval which may, in some cases, be deferred wholly or in part pending the submission of supporting detail, eg costed equipment schedules.

Appendix 2, Part 3

Procedural Stage 3: General Notes

1. The work at Stage 3 is related only to the first scheme or phase of the project.

2. It is essential that cost planning should be operated from the outset of Stage 3 on both building and engineering detail and specification (see HBPN 6). The NCP (see HBPN 6, Appendix 13) should be based on the Budget Cost for the scheme or phase now passing into detailed design, and the total cost should be readily reconcilable with the approved Budget Cost for the scheme. It should be drawn up and managed by the Quantity Surveyor and should cover both the building and engineering costs of the scheme. When a separate cost plan is to be operated by the Engineer (see HBPN 6, Part 2) he must provide the Quantity Surveyor with information which will enable the latter to keep the costing of all aspects of the scheme under review in a master cost plan. The need for effective cost planning stems from a DHSS requirement that the design solution must be capable of execution within a pre-determined Budget Cost. The practice of designing first then costing the result is quite unacceptable. The NCP should be regularly updated by the RHA to form the basis of any informal discussion with DHSS during this stage.

3. The cost plan and subsequent contract documents should distinguish between those components which are to be ordered directly under MDB arrangements, and other constructional details which have to be measured and priced by the main contractor. RHAs should make use of the industrial building technology (set out in the Design Notes) during Stage 3 in order to obtain the maximum use of systems and standards. This involves the maximum use of MDB components; schedules of these should be sent to DHSS at tender stage to enable DHSS to monitor uptake and trends of usage.

4. The client's brief should be regarded as frozen at the conclusion of Stage 3B.

5. It is essential that the progress of the Stage 3 work should be monitored by the Project Team by reference to the MCP. Any apparent acceleration or delay which will affect the planned starting date on site should be notified to DHSS on the next planning progress return.

6. During this Stage close collaboration between (DHSS and RHA in particular) architects, engineers and quantity surveyors and, where appropriate, other disciplines should be exercised so that excess costs can be considered in good time to minimise any delay at submission Stage 3H. The Project Team as a whole should consider any proposed change to the brief or design which arises during this Stage and which is considered to be essential, bearing in mind that any substantial change must be approved before the work proceeds (see also Stage 4, General Note 7). If it is considered that the change is likely to increase cost or cause delay, a full assessment of the effects to cost and programme should be made and a decision reached on the following alternatives:

(a) amend the design before tenders are invited;

(b) hold the work over until the main construction contract is completed and have it carried out as a post-contract alteration or addition;

(c) incorporate the change in the contract as an authorised variation. In view of the potential penalties in time and cost this course should be quite exceptional. (Any DHSS approval necessary to the cost of the variation will depend upon guidance and tolerances in force at the time).

7. When a scheme is selected for Stage 3 approval, DHSS may be concerned to see that the operational policies are being achieved within the design concept. Sketch plans, schedules of accommodation and departmental policies should be available, in case they are required by DHSS, at Stage 3H.

8. The preparation of production material can begin as soon as architectural sketch drawings and engineering draft working drawings for each department are finalised and when the Project Team is satisfied that the work can be contained within the overall cost plan figure.

9. The aim, during Stage 3G and onwards, should be to bring the building and engineering design forward together so that the engineering tenders can be called for, and the contracts let, concurrently with those for the building work. For this reason, proposed changes in architectural or structural designs should always be examined for their effect on the progress of engineering design (and vice versa) before acceptance. Failure in architectural/engineering liaison at Stage 3G must be avoided: it can only lead to (a) sub-optimal design solutions; (b) incomplete tender documentation with consequential effects on tender levels; and (c) the possibility of claims in the post-contract stage.

10. Stages 3G to 3J relate to the sequence of decision for normal competitive tendering. Alternative arrangements for building and preparation of tender documents may be necessary where other forms of contracting are to be used, and these should be evolved in consultation with DHSS.

11. Acquisition of land needed for the development must be completed during Stage 3. Earlier action should be taken where it is anticipated that a Compulsory Purchase Order may be required as normally a period of up to two years is taken to complete the necessary procedures. Tenders should not be sought until possession of the land (and right of entry) is certain.

12. Reference is made in Appendix 2, Stage 1E to Outline Town Planning and Royal Fine Arts Commission requirements. Under DoE Planning Circular 80 (dated October 1972) outline planning permission for certain buildings, eg boilerhouse chimneys, may be granted subject to the acceptance of detailed drawings which only become available towards the end of Stage 3. Project Teams should recognise that this requirement could cause difficulty in finalising the design, maintaining the programme for the contract start and may perhaps lead in certain cases to a local or public enquiry.

13. When the EEC "restricted" procedure applies, it will be necessary (and desirable) to place the OJ Notice during Stage 3, in order to meet the prescribed time limits and establish the financial and technical competence of applicants. It is only after this process has been carried out that the list of tender invitations can be prepared in Stage 4. The OJ Notice should be prepared for advertisement as soon as the necessary information becomes available during Stage 3, in order to minimise delay in the latest stages of the tendering process. When the EEC "open" procedure applies, the OJ Notice will not be placed until Stage 4.

Stage 3. IMMEDIATE SCHEME ONLY: Cost planning, detailed design & production work, pre-tender estimate

Stage	Executive Responsibility	Task	Source of Guidance	Notes
3A: Notional Cost Plan	Project Team	(a) Draw up NCP in outline only, giving the main elements and total area of each block of work, together with External Works;	HBPN6 (Appendix 13)	
		(b) Submit to DHSS(HB) for information.	HBPN1 (Appendix 3)	
3B: Detailed Design Brief	Project Team	(a) Firm up detailed project policies (departmental policies);	HBPN2 (para 8); BNs; regional and outline project policies	
		(b) Submit to DHSS (Medical and Nursing) - if requested - for information;	HBPN1 (Appendix 3)	
		(c) List major group 2 equipment;	ENs	
		(d) Complete room data;	BNs and DNs	Compilation of room data will have commenced during Stage 2.
		(e) CARRY FORWARD TO STAGE 3C.		
3C: Sketch Plans	Project Team	(a) Prepare room data sketch designs according to the dimensional frameworks and scales set out in the DNs with adequate detail to ensure the adoption of co-ordinated components and assemblies. Prepare this material so that it can be rapidly implemented into production information;		
		(b) Prepare preliminary engineering production material against cost plan;		
		(c) Prepare final sketch plans;		
		(d) CARRY FORWARD RESULTS TO STAGE 3E.		

Stage	Executive Responsibility	Task	Source of Guidance	Notes
3D: Equipment Schedules	Project Team	(a) Prepare provisional equipment schedules (group 2, 3 and 4 items); (b) CARRY FORWARD TO STAGE 3E.	DNs and ENs	
3E: Check on Design	Project Team	(a) Check that accommodation provided in the design matches the client's brief and is as agreed at Stage 2J (or subsequently) and with the detailed brief at Stage 3B, and that the brief remains unchanged; (b) CARRY FORWARD TO STAGE 3F.	Stage 3: General Note 6	
3F: Detailed Design	Project Team	(a) Prepare the production material (working drawings etc) making the maximum use of industrialised building methods and MDB; (b) Prepare Bills of Quantities (for Engineering, schedules of rates plus specifications are the preferred documentation); (c) Prepare OJ Notice (when "restricted" procedure applies) for issue before the end of Stage 3; (d) CARRY FORWARD TO STAGE 3G.	DNs, TM, MDB brochures EEC Directives 71/305 and 72/277	

Stage	Executive Responsibility	Task	Source of Guidance	Notes
3G: Pre-tender Estimate and Summary Cost Plan	Project Team	(a) Prepare PTE and SCP, using Forms C1, C2, C3 and C4; (b) Prepare revenue cost estimate.	HBPN6 (Appendix 12)	 For RHA information.
3H: Sub-mission	Project Team	Submit* PTE and SCP (Forms C1, C2 & C3): (a) to RTO, or; (b) for selected schemes, via RTO, to DHSS.	HBPN6 (Appendix 12)	 (i) 6 copies to DHSS(HB); (ii) additionally, DHSS approval will be required for schemes selected to Stages 1 or 2 for which the PTE cannot be contained within the previously approved sum and/or where there have been significant changes in the scheme (see also Appendix 3).
Approval	RTO or DHSS	APPROVAL		
3J: Tender Documentation	Project Team	(a) Prepare tender documents; (b) CARRY FORWARD TO STAGE 4.		

* When variations in content between the PTE and Budget Cost submission (Stage 2J) occur, a reconciliation statement should be included.

Procedural Stage 4: General Notes

1. It is desirable that tenders for sub-contracts (including MDB components - see MDB document 0/1 "Use and Index") should be invited whenever possible before or concurrently with tenders for the main contract, to permit assessment of the aggregated tenders against the PTE, and should allow an acceptance period sufficient to cover acceptance of the main contract.

2. No contract may be awarded at a sum in excess of the Budget Cost, uplifted by any subsequently published percentage increases in cost allowances (and exceptionally for approved adjustments in functional content) without the prior approval of the RTO. DHSS approval will be required for excess tenders when schemes have been selected for Stage 2 or later submission.

3. When DHSS approval is required:

(a) if the lowest tender, adjusted for main sub-tenders, for the scheme is on or below the PTE (or such sum which DHSS has approved in lieu of the PTE), the RHA may proceed to contract. If it is proposed to accept a tender other than the lowest, or a qualified tender or alternative offer, even if it is on or below the PTE, DHSS must first be consulted.

(b) if the lowest acceptable tender, adjusted for main sub-tenders, exceeds the PTE by not more than two per cent, the RHA must reduce the cost to the PTE. The RHA may then proceed to contract, informing DHSS of the steps taken.

(c) if the lowest acceptable tender, adjusted for main sub-tenders, is more than two per cent over the PTE and the RHA wish to proceed with the scheme, the results of the tendering and the RHA's proposals for reducing the cost to PTE level must be sent to DHSS for approval, prior to acceptance of the tender.

(d) DHSS will use its best endeavours to deal with such submissions within the period (or extended period) for acceptance of the tender. Since late submissions are disruptive of other work, and may render it impracticable to meet a RHA's deadline, DHSS should be informed immediately on receipt of an excess tender, or earlier if it becomes apparent that there will be an excess (adjusted, if possible, for main PC items, though notification should not be delayed on this account). This will allow preliminary consideration to be given, in advance of the RHA's report -

(i) on the steps proposed for a reduction of the tender figure;

(ii) and, if necessary, to the request for DHSS approval to any remaining excess.

Formal requests containing proposals for reductions which the RHA are prepared to make should reach DHSS well before the acceptance date (or extended acceptance date). Provided this scheme has been discussed and the reductions agreed, the formal request may, if time is pressing, be made by telephone and concurrently confirmed in writing.

4. The cost of the work established after action under paragraphs 2 or 3 above replaces the PTE as the controlling cost for the work and becomes the "approved sum". In cases where the approved sum is lower than the PTE, the difference is not available for further works under the scheme. The entry in the RHA's capital programme remains unchanged in accordance with Paragraph 19 of the Enclosure to HM (67) 51, unless the difference is excessively large in which event DHSS (RPCU) should be notified. For schemes specially financed, the allocation will be reduced by DHSS (RPCU).

5. When it is clear that the scheme is to proceed (despite the receipt of tenders in excess of the PTE) but time is needed for the action in paragraph 3 above, the RHA may, with prior DHSS approval, issue a Letter of Intent (providing this is not a binding contract) to the successful main and sub contractors, pending signature of the substantive contracts.

6. In all cases where the works period will exceed two years, and in appropriate cases where the period will be less than two years, a programme for the execution of the works should be agreed with the main contractor and reflected in a MCP. The MCP should, where necessary, also include the timing of provision of drawings to the contractors. The management of the MCP should be the responsibility of appropriately skilled members of the Project Team or RHA staff. It is important that the Project Team maintains contact with the scheme during construction.

7. There should be a clearly established procedure for the control of all variations. Client variations of a contract should be made only in very exceptional circumstances, bearing in mind the penalties by way of contractors' claims for delays, etc, which may be incurred. See also HBPN 6, paras 61-68.

8. If contractors' claims lead to additional payments, prior DHSS authority must be obtained to such payments. Payments due to fluctuation clauses do not require specific DHSS approval.

9. The appointed architect and engineer are responsible for the general oversight of the execution of contracts, but constant supervision is not part of their duties. When this is required, the RHA should, on the advice of the architect or engineer, appoint a Clerk of Works (and other site staff as necessary). The architect or engineer will control the work of such staff and it will often be convenient for members of their own staff to discharge these duties (against reimbursement by the RHA in the case of private architects or engineers).

10. Instalment payments and the final account should be settled promptly, especially in the case of firm price contracts. A financial examination of all proposed settlements should be made by the Regional Treasurer before the technical officer gives his final certificate. When this may lead to unacceptable delay, the examination may be carried out retrospectively and provision for this to be done should be included in the contract. The object of this check is to ensure that payments are in accordance with the terms of the contract, and not to check technical aspects of the work.

Stage 4: CONTRACT AND CONSTRUCTION

Stage	Executive Responsibility	Task	Source of Guidance	Notes
4A: Contract	Project Team	(a) Invite tenders; (b) Evaluate tenders against PTE; (c) Establish the "approved sum"; (d) Establish construction period, MCP and arrangements for contractor/supervisors/client management and information relationships; (e) Award contract.		Details of tender accepted, including sub-contracts, to be sent to DHSS - 5 copies for QS and Engineer (see Appendix 3).
4B: Construction	Project Team	Construction Control variations. Final account.	HBPN6 (paras 61-68)	Cost analyses to be sent to DHSS - 5 copies for QS and

Stage 5 : COMMISSIONING

Stage	Executive Responsibility	Task	Source of Guidance	Notes
5	Project Team	(a) Prepare Commissioning Team brief;		Work may begin during Stage 3; in particular campaigns for phased recruitment must be undertaken well in advance of staff assembly and training.
		(b) Appoint Commissioning Team, consisting largely of Area or District staff under RHA leadership;		
	Commissioning Team	(a) Prepare MCP in detail for commissioning, including closure of replaced hospitals or facilities;	KEF Report (Commissioning New Hospital Buildings)	
		(b) Finalise operational policies and prepare operational handbooks and job specifications;	Handbooks prepared by hospital authorities, etc, elsewhere	
		(c) Complete equipment schedules;		
		(d) Order equipment;		
		(e) Prepare revenue estimate, including incidence of additional expenditure and savings from closures over the first years of operation;	HBPN6	
		(f) Finalise: (i) establishment; (ii) staff assembly and training; (iii) equipment assembly, storage and installations; (iv) engineering commissioning; (v) cleaning;	TM 17	
		(g) Prepare maintenance manuals.		
		OPENING CEREMONY, PUBLIC RELATIONS AND PUBLICITY.		

Stage 6: EVALUATION

Stage	Executive Responsibility	Task	Source of Guidance	Notes
6	Project Team	(a) Organise Work Study examination of selected departments with emphasis on communication aspects; (b) Report to RTO.		Evaluation is not usually fruitful if done too soon after the building comes into operational use - a study some 9 months or so after commissioning is recommended.

INFORMATION REQUIRED BY DHSS

STAGE 1G

(a)	Details of client's brief provided at Stage 1B.	For all projects and schemes selected by DHSS for approval to Stage 1.
(b)	Form FC(R) - see HBPN3 - and accompanying narrative justifying and supporting stated requirements and phasing proposals.	
(c)	Appraisal of possible sites and preliminary conclusion (Stage 1E).	
(d)	Map of area to be served showing existing and planned facilities, possible sites for new hospital provision and road proposals.	
(e)	Any unorthodox contracting proposal.	
(f)	Forms A1, A2 and A3 if on-costs significantly differ from 50% (HBPN6, Appendix 10).	
(g)	Revenue consequences Form RCCS A (HBPN6, Appendix 4).	
(h)	Outline MCP (if prepared).	

STAGE 2J

(a)	MCP (STAGE 2A).	For all projects and schemes selected by DHSS for approval to Stage 2.
(b)	Confirmation of site selection (Stage 2B).	
(c)	Whole hospital policies and outline policies for major space-consuming departments.	
(d)	DCP (HBPN5).	
(e)	Forms B1, B2, B3 (HBPN6, Appendix 11).	
(f)	Scheme only: Revenue consequences Forms RCCS B1, B2, B3, B4 (HBPN6, Appendix 4).	

STAGE 3A NCP (HBPN6, Appendix 13).	(a) For all schemes selected by DHSS for approval to Stage 3.
STAGE 3B Detailed Design Brief*	
STAGE 3G	(b) For approval in respect of any scheme selected to Stages 1 or 2 for which the PTE cannot be co - tained within the previously approved sum and/or where there have been significant changes in the scheme.
(a) PTE.	
(b) SCP.	
(c) Departmental operational policies, schedules of accommodation and sketch plans (only if specifically requested by DHSS).	

* Submit to DHSS (Medical and Nursing) - if requested.

Stage 4A Details of Tenders (HBPN6, Appendix 14).	(a) For approval in respect of any selected scheme for which adjusted tenders are in excess of the approved sum. (b) For information in respect of all other named schemes in a programme, whether selected or not.
Stage 4B Standard Form of Cost Analysis (HBPN6, Appendix 6): (1) Part 1 - Building and Engineering Schemes; (2) Part 2 - Engineering Services only.	For information in respect of all programmed schemes, whether selected or not. Note: For engineering services, levels 1 and 2 to apply to all schemes of £250,000 and above; levels 3 and 4 to apply to three or four schemes each year in each RHA programme (to be selected by DHSS).

Appendix 4

Procedure for Partial Redevelopment or Extension of an Existing Hospital (including subsequent schemes of a new hospital development) Scheme Only

START

Is scheme to be undertaken at a (potential) DGH site?

no → Is scheme part of a project, current or projected?

yes → Is scheme part of & consistent with an approved project?

yes → Is it agreed that project does not need updating?

yes → Course 2

no → Course 1

no → ARE further schemes likely within next decade or so?

no → Course 3

yes → Course 4

Course 1

1. AGREE ϕ any change in existing functional content.
2. FOLLOW HBPN1 (Stages 2A, C, D, E, G, H and J, and Stage 3) for scheme.

Course 2

1. AGREE ϕ any minor changes (ad hoc procedure).
2. NOTIFY ϕ revised Departmental Costs (if DCG has changed) and of updated on-costs for the remainder of project.
3. FOLLOW HBPN1 (stages 2A, E, G, H and J, and Stage 3) for scheme.

Course 3

1. AGREE ϕ any changes in existing or previously agreed functional content of Hospital ≠.
2. AGREE ϕ, if DCP exists, any modifications. When there is no DCP produce one in full for first scheme, in outline for remainder of project. (Depending on the nature of the development it may be reasonable to agree ϕ a block plan or zone plan instead).
3. CONSIDER whether to avoid prejudicing future developments short life building should be used.
4. FOLLOW HBPN1 (Stages 2A, C, D, G, H and J, and Stage 3) for scheme.

Course 4

FOLLOW normal procedure for project and immediate scheme (HBPN1, Appendix 2 as appropriate).

Note: When a project has already been approved (Stages 1 & 2) but substantial changes are proposed, it is for agreement* how far previous grounds should be gone over.

ϕ with RTO (and if a selected scheme, with DHSS).

* between RHA and AHA (or DHSS and RHA if a selected scheme).

≠ If necessary, Stage 1 information should be provided, This will depend upon size, nature of scheme. It will be for agreement* at that time as to the extent of this information.

RHA/AHA Building Procedure

Scope

1. The DIRECTION to REGIONAL HEALTH AUTHORITIES under SECTION 7(2) of the NATIONAL HEALTH SERVICE REORGANISATION ACT, 1973, which is set out in Appendix 6 authorises the exercise of building functions by an AHA.

2. In accordance with the Direction, delegation to an AHA of the planning, design and construction of health service buildings will be at the discretion of the RHA and will apply only to projects or schemes in programmes approved by DHSS or, for programmes of small schemes, by RHAs. This discretion is necessary because AHAs will vary considerably in size and in capacity to undertake building.

3. When a delegated scheme is a named scheme in the RHA's capital programme:

   (a) the RHA will have programme responsibility for that scheme (including the provision of information on Form PPR1 and PPR2 returns);

   (b) in all cases emphasis will be on cost control and a dated MCP.

4. Further guidance will be issued later.

Instrument in Writing

DIRECTION TO REGIONAL HEALTH AUTHORITIES UNDER

SECTION 7 (2) OF THE NATIONAL HEALTH SERVICE REORGANISATION ACT, 1973.

(To Follow)

1. Other Building Procedure Notes in the series are:

HBPN 2: Planning Policies

HBPN 3: Assessment of Functional Content

HBPN 5: The Development Control Plan

HBPN 6: Cost Control

These Notes are DHSS publications. They may be purchased upon application to DHSS, Hospital Building Division, Room 918, Euston Tower, 286, Euston Road, London NW1 3DN.

2. Local Authority Building Notes* referred to in paragraph 43 of this Note are:

LABN 1: Costing and Building Procedures

LABN 3: Local Health Authority Clinics

LABN 7: Ambulance Stations

3. Planning, Design and Construction of Hospital Buildings for the NHS: A Report by Herbert J Cruickshank CBE.

This report is a DHSS publication which may be purchased upon application to DHSS, Hospital Building Division, Room 818, Euston Tower, 286, Euston Road, London NW1 3DN.

4. A Glossary of Hospital Planning Terms: The King's Fund Hospital Centre.

THC Reprint No 563.

5. Other DHSS and Welsh Office publications* include:

Hospital Building Notes, Health Service Design Notes, Equipment Notes,

Building Bulletins and Technical Memoranda.

*These publications can be purchased from the Government Bookshops in London (post orders to P O Box 569, SE1), Edinburgh, Cardiff, Belfast, Manchester, Birmingham and Bristol or through any bookseller.